REMARKS

Claims 1-11 are pending. Claim 4 is withdrawn. Claims 1, 3, and 4 are amended. Claim 1 has been amended to claim more fully the recited subject matter and to make minor editorial changes. Support for the amendment to claim 1 may at least be found in the originally filed specification, for example, at the paragraph spanning page 5, line 25 to page 6, lines 10 and Example 6, and is described in detail below. No new matter is added.

Amendment of the claims herein is not to be construed as acquiescence to any objections/rejections set forth in the instant Office Action and were done solely to expedite prosecution of the application. Applicants reserve the right to pursue the subject matter of the claims as originally filed in this or one or more subsequent patent applications.

Claim Objections

The Examiner has objected to claims 1 and 3 for the recitation of the term "vaccine." Without acquiescence and in order to expedite prosecution, claims 1, 3, and 4 have been amended to delete the term "vaccine". Applicants respectfully request reconsideration and withdrawal of the objection.

Claim Rejections – 35 U.S.C. §102

Claims 1-3 and 5-11 are rejected under 35 U.S.C 102(b) in view of U.S. 5,891,432 to Hoo et al. ("Hoo"). Applicants respectfully disagree and traverse the rejection.

In order to anticipate the invention as claimed, the cited referenced must teach each and every element of the claim. Claim 1 has been amended to recite that: "said fusion polypeptide is bound to a lipid on said virus or said cell by said cell—surface binding moiety." As claims 2-3 and 5-11 depend directly or indirectly from claim 1, they also incorporate this feature.

Thus, the presently claimed invention is a composition suitable for administration to a subject, said composition comprising a virus or a cell and a fusion polypeptide, said fusion polypeptide comprising a first amino acid sequence which

comprises a cell-surface binding moiety and a second amino acid sequence comprising a ligand for a cell surface polypeptide of a leukocyte, wherein said composition includes said fusion polypeptide bound to said virus or said cell and includes said fusion polypeptide which is not bound to said virus or said cell, and wherein said fusion polypeptide is bound to a lipid on said virus or said cell by said cell—surface binding moiety.

As shown in Example 6 of the instant application, compositions useful according to the claimed invention comprise bound and free fusion polypeptide, where the bound fusion polypeptide is bound to a lipid on the cell by a cell—surface binding moiety. Two groups of cells were prepared that were either washed or unwashed after being incubated with a fusion protein of the invention that can bind a lipid on the cell surface. Example 6 describes the results of vaccinating mice with the washed and unwashed groups of cells that had been incubated with the fusion protein:

> Approximate percentages of mice surviving tumor-free to day 70 after challenge were: WT, 15%; soluble GM-CSF, 50%; GPI-GM-CSF washed, 60%; GPI-GM-CSF unwashed, 85%. Thus, even though the GPI-GM-CSF washed vaccine contained over a thousand-fold less GM-CSF than the unwashed soluble, administration of cells decorated with GPI-GM-CSF was more effective. **Furthermore, the GPI-GM-CSF unwashed vaccine, *in which some molecules were not attached to a cell*, was even more effective**." [emphasis added; page 177, line – page 178, line 5]

Thus, the specification discloses a composition of the invention containing both fusion protein bound to cells by a lipid (e.g., glycosylphosphatidylinositol) and unbound fusion protein (i.e., the unwashed cells described in Example 6) was effective in vaccinating mice against tumor development.

In contrast, Hoo fails to teach such a fusion protein that is bound to a lipid of a cell. Instead, Hoo teaches that a fusion protein may be attached to a cell by a variety of transmembrane domains (col. 7, ln. 21 – col. 8, ln. 14) that are inserted into the plasma membrane. Thus, Hoo does not teach or suggest a composition containing a fusion polypeptide bound to a lipid on a virus or cell by a cell-surface binding moiety, as presently claimed.

In view of the above, Hoo does not teach or suggest each and every element of the claims, as amended. Because of this deficiency, Hoo cannot be used as the basis for a rejection under 35 U.S.C. 102(b). Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection.

Obviousness-type Double Patenting

The Office Action states that the instant claims are rejected under the judicially created doctrine of obviousness type double patenting in view of several co-pending applications. Upon notification of otherwise allowable subject matter in the instant case, Applicants will address the double patenting rejections.

CONCLUSION

In view of the foregoing amendments and arguments, Applicants respectfully request reconsideration and withdrawal of all pending objections/rejections and allowance of the applications with claims 1-3, and 5-11 presented herein. If a telephone call with Applicants' representative would be helpful in expediting prosecution of the application, Applicants invite the Examiner to contact the undersigned at the telephone number shown below.

Applicants submit this paper in response to the final office action dated December 10, 2009, in the above-referenced patent application along with a request for continued examination, a petition for a three-month extension of time, and the required fees based on small entity status. Applicants believe that no additional fees are required for consideration and entry of this paper. Nevertheless, Applicants hereby authorize the Director to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to Deposit Account No. **04-1105**, under Order No. 85849DIV5(211111).

Dated: June 9, 2010

Respectfully submitted,

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